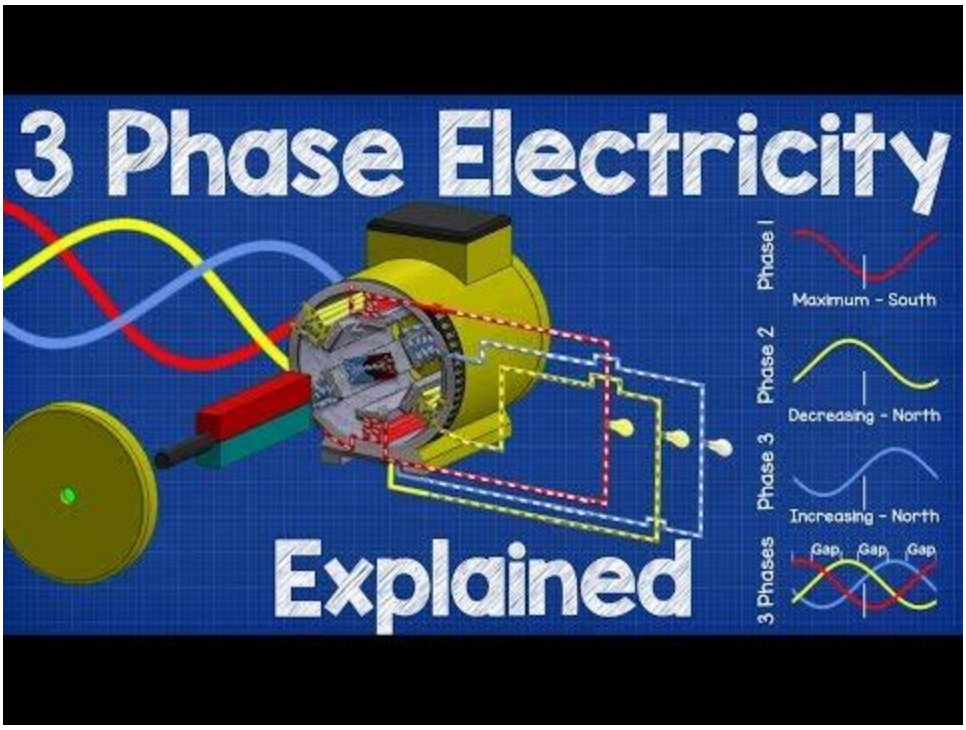
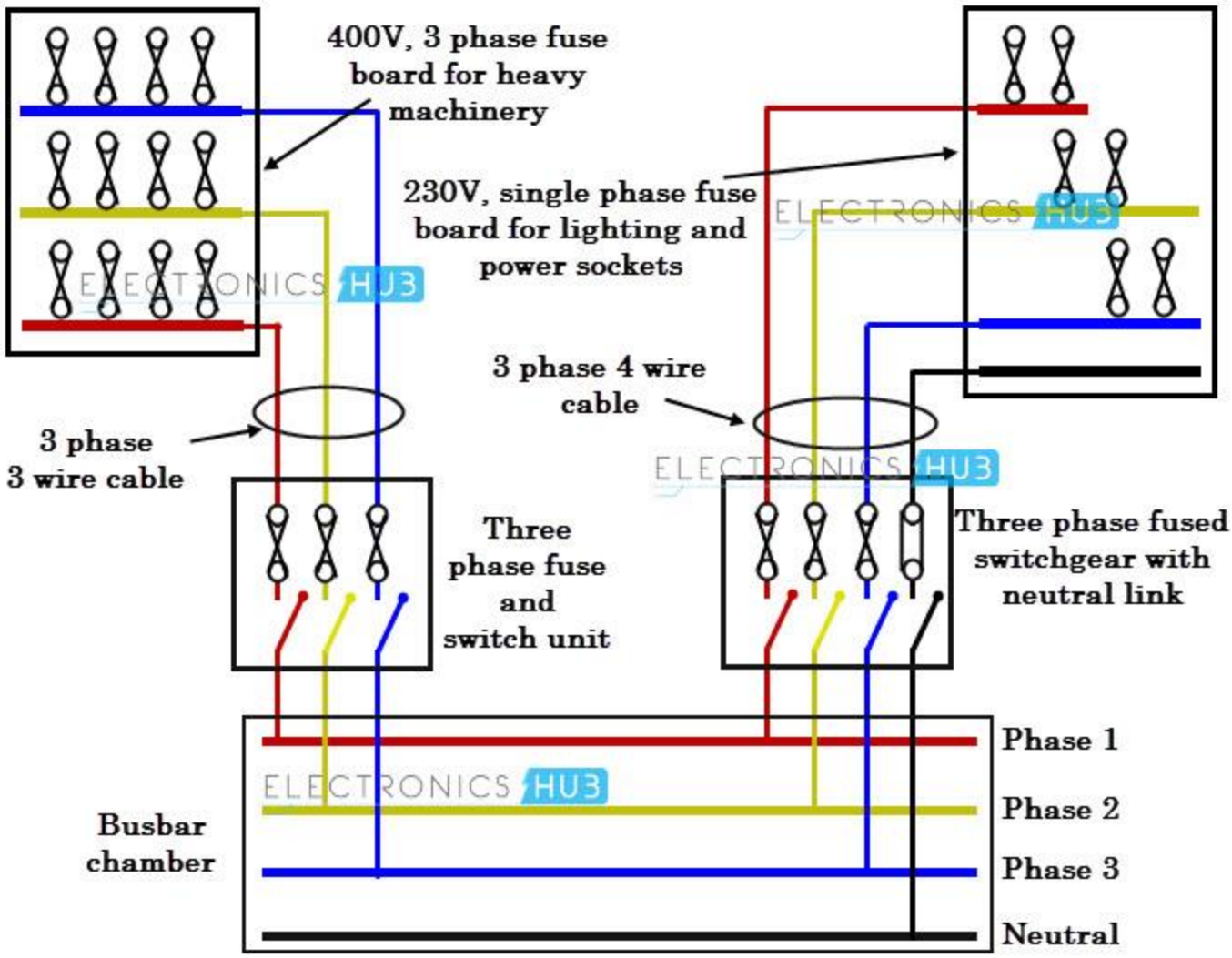
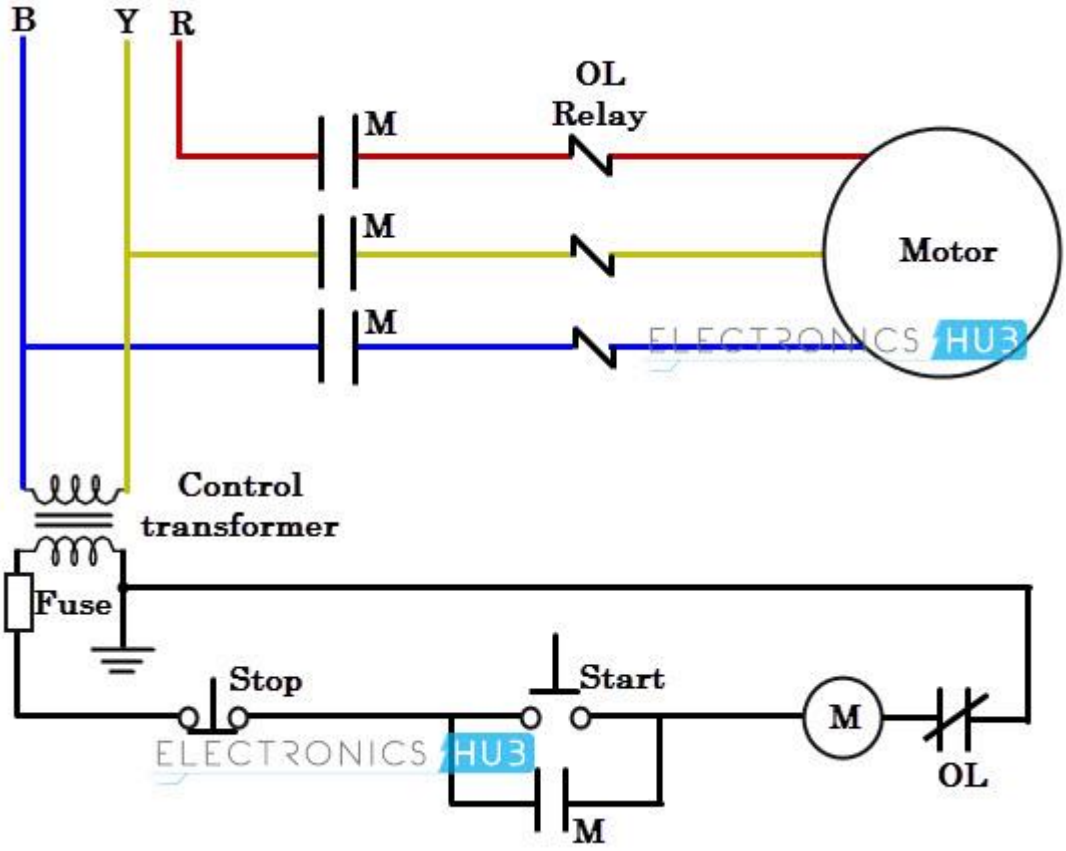
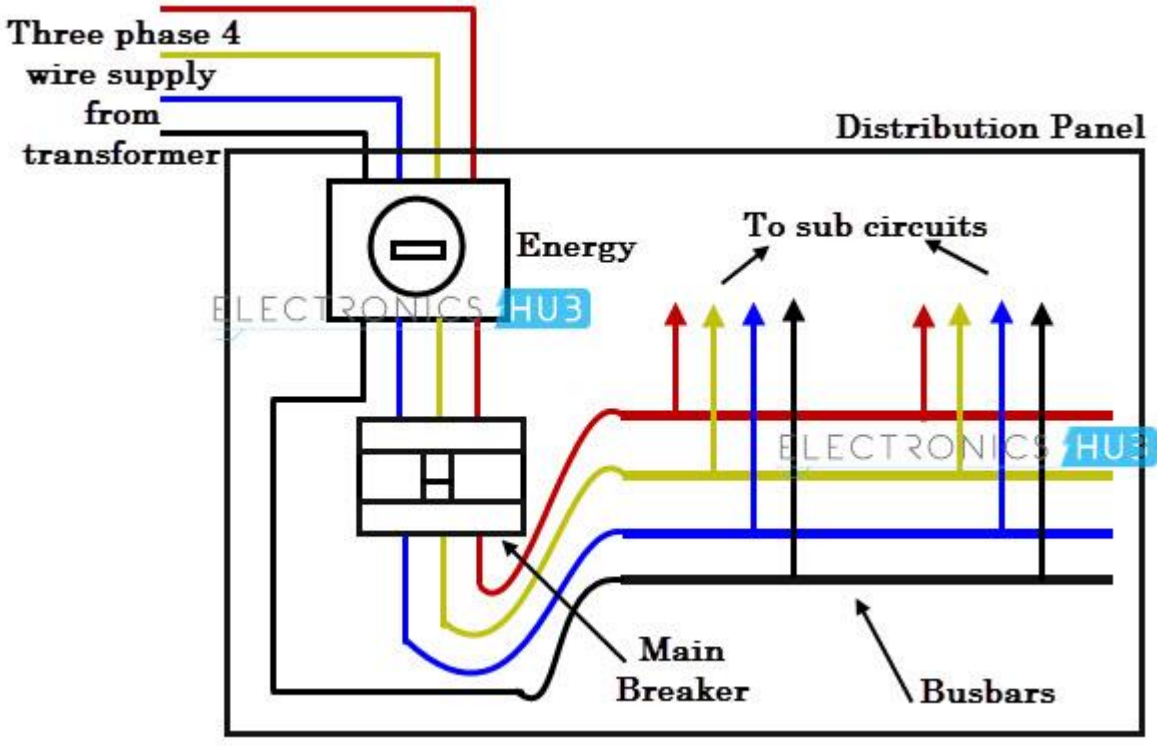
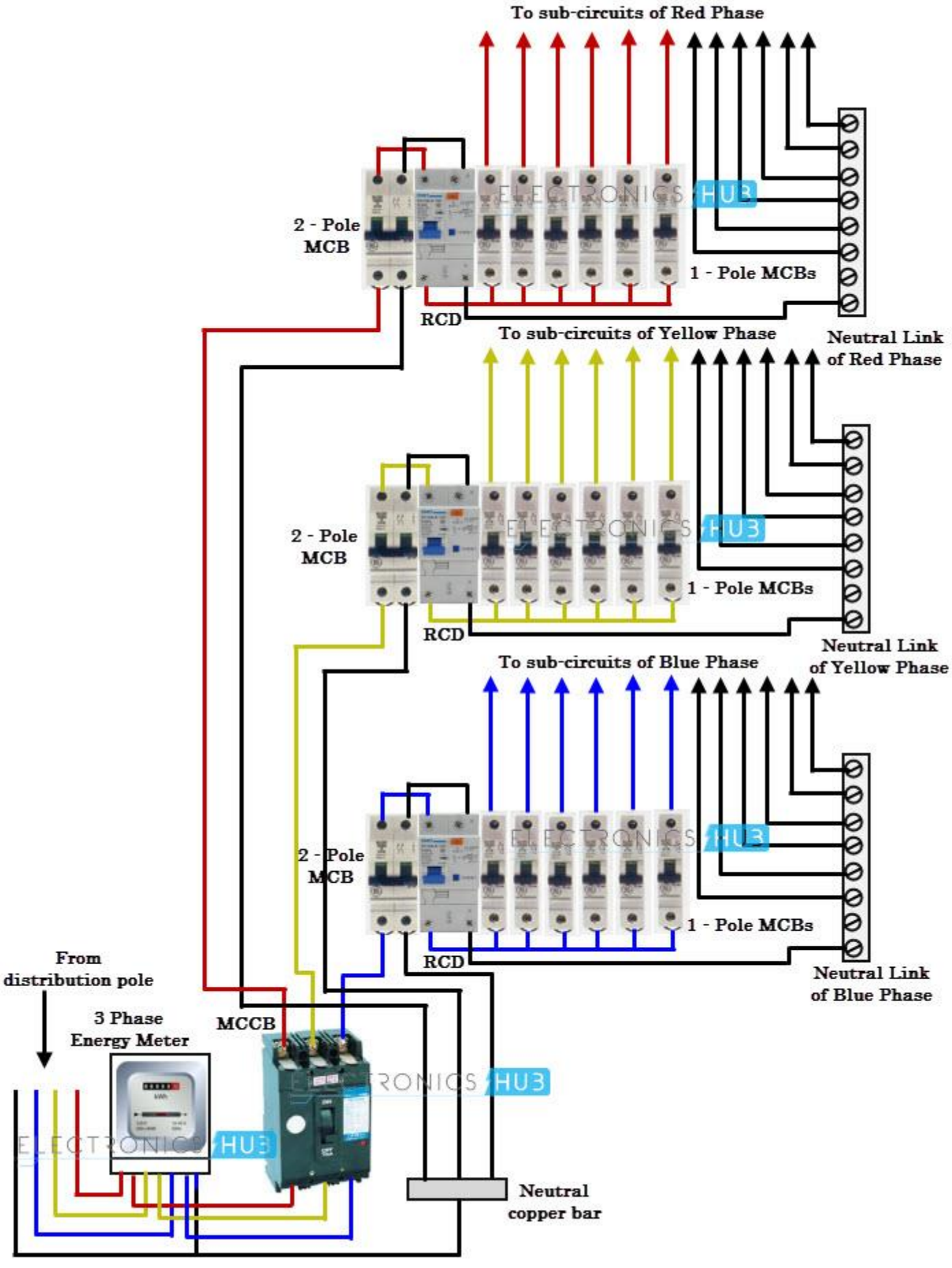
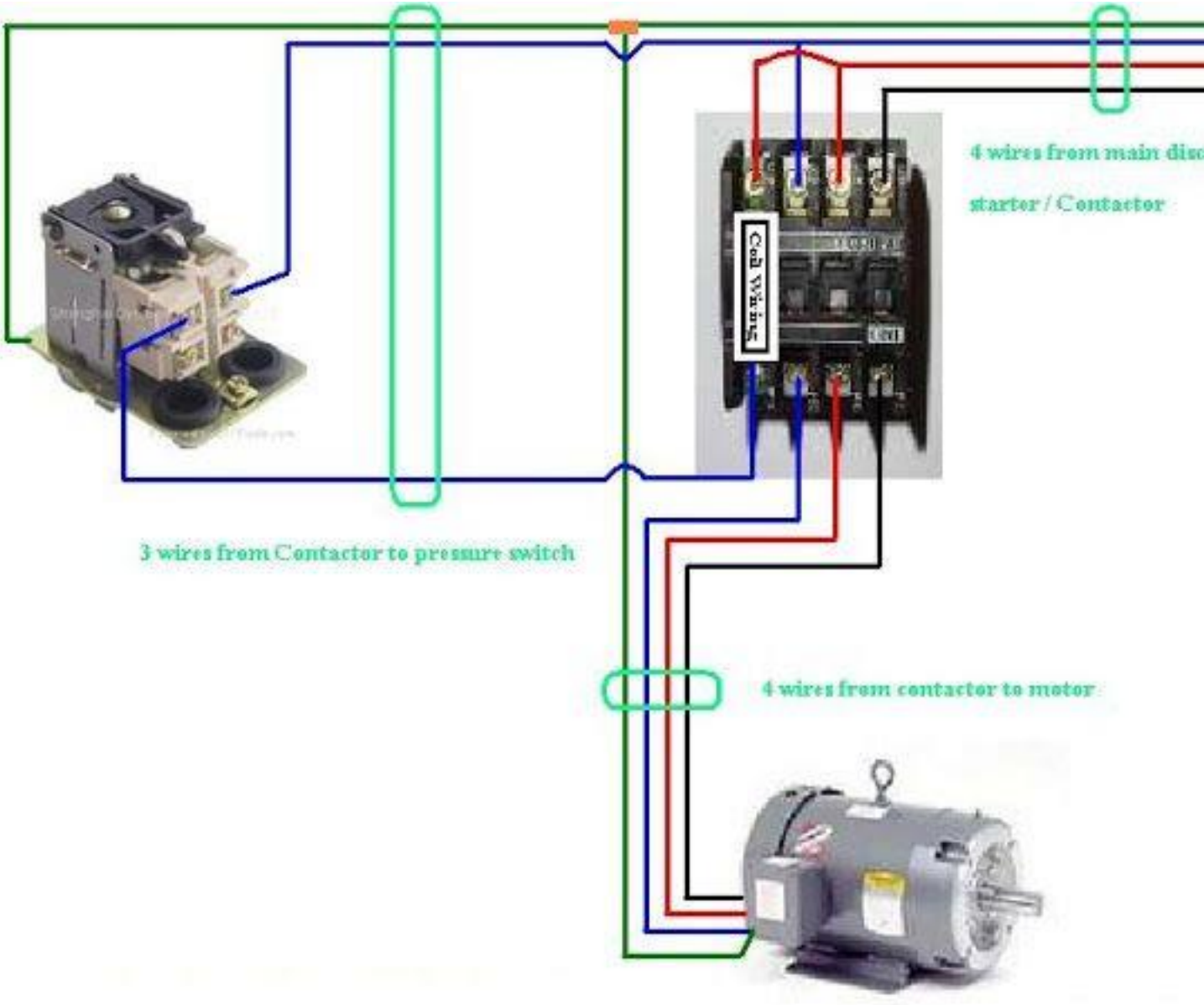

3 Phase Electricity
Explained
Phase 1
Maximum - South
Phase 2
Decreasing - North
Phase 3
Increasing - North
3 Phases
Gap
Gap
Gap

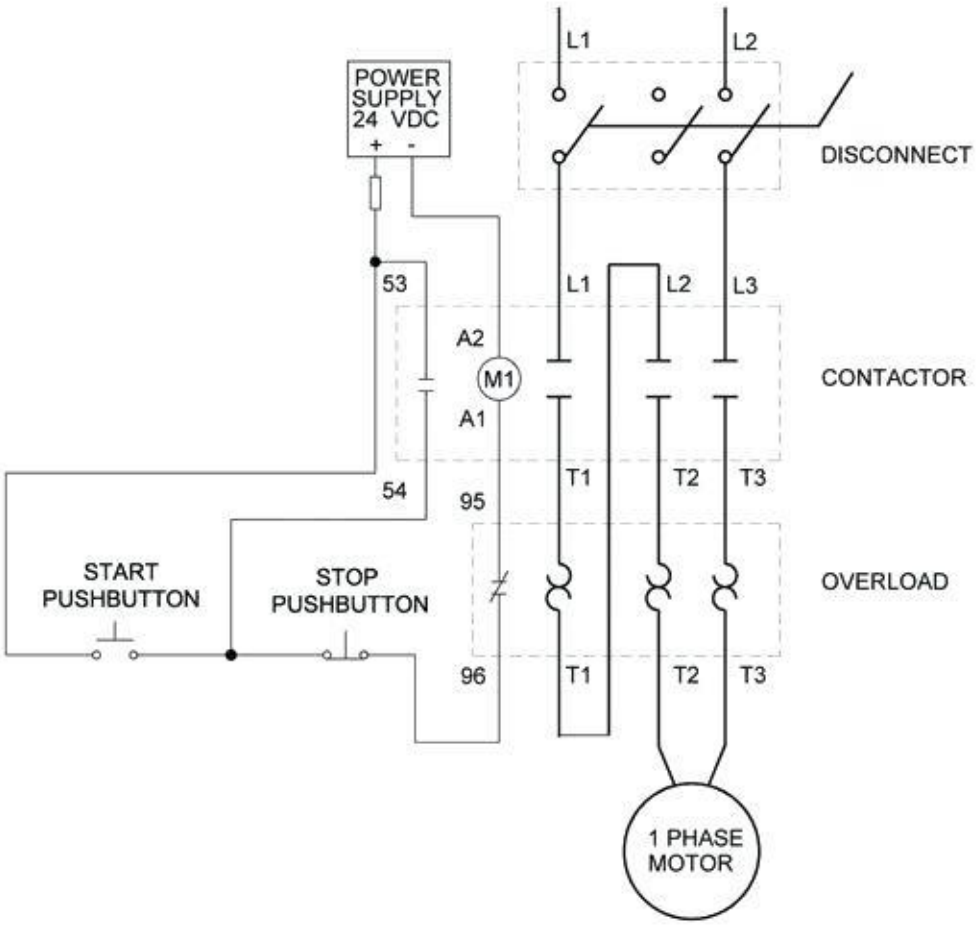

400V, 3 phase fuse board for heavy machinery
230V, single phase fuse board for lighting and power sockets
3 phase 4 wire cable
3 phase 3 wire cable
Three phase fuse and switch unit
Three phase fused switchgear with neutral link
Busbar chamber
Phase 1
Phase 2
Phase 3
Neutral
ELECTRONICS HUB


B
Y
R
OL
Relay
M
M
M
Motor
ELECTRONICS HUB
Control
transformer
Fuse
Stop
Start
M
OL
M
ELECTRONICS HUB


Three phase 4
wire supply
from
transformer
Distribution Panel
Energy
To sub circuits
ELECTRONICS HUB
ELECTRONICS HUB
Main
Breaker
Busbars


To sub-circuits of Red Phase
2 - Pole MCB
1 - Pole MCBs
RCD
Neutral Link of Red Phase
To sub-circuits of Yellow Phase
2 - Pole MCB
1 - Pole MCBs
RCD
Neutral Link of Yellow Phase
To sub-circuits of Blue Phase
2 - Pole MCB
1 - Pole MCBs
RCD
Neutral Link of Blue Phase
From distribution pole
3 Phase Energy Meter
MCCB
Neutral copper bar


4 wires from main disc
starter / Contactor
3 wires from Contactor to pressure switch
4 wires from contactor to motor


L1
L2
POWER SUPPLY 24 VDC
+ -
DISCONNECT
53
L1
L2
L3
A2
M1
A1
CONTACTOR
54
95
T1
T2
T3
START PUSHBUTTON
STOP PUSHBUTTON
OVERLOAD
96
T1
T2
T3
1 PHASE MOTOR